



SUBSTITUTE SEQUENCE LISTING

<110> Ottawa Health Research Institute

<120> Diabetogenic Epitopes

<130> 034205.003

<150> PCT/CA05/00025

<151> 2005-01-10

<150> US 60/535,278

<151> 2004-01-09

<160> 52

<170> PatentIn version 3.3

<210> 1

<211> 10

<212> PRT

<213> Artificial

<220>

<223> Diabetogenic epitope from gliadin protein isoforms or Glb1 based on wheat protein

<400> 1

Glu Glu Gln Leu Arg Glu Leu Arg Arg Gln
1 5 10

<210> 2

<211> 9

<212> PRT

<213> Unknown

<220>

<223> Tryptic peptide of wheat storage globulin

<400> 2

Val Ala Ile Met Glu Val Asn Pro Arg
1 5

<210> 3

<211> 2018

<212> DNA

<213> Unknown

<220>

<223> Wheat gene

<400> 3

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cttcagcggg gcggtgcagcg gtgccagcag gaccggccgc ggtactctca tgcccgggtgc 180
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gagctggagc ccgtgccatt tgagagctga acttgatatg gtgtgtaagt ttgtcagtac	1860
gcgggagtag cataaataag tcgtggcacg ggctcagtac gatgatgtaa gttgcgtacc	1920
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ttcagtaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa	2018

<210> 4
 <211> 588
 <212> PRT
 <213> Unknown

<220>

<223> WP5212 wheat protein sequence

<400> 4

Met Ala Thr Arg Gly Arg Ala Thr Ile Pro Leu Leu Phe Leu Leu Gly
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Thr Ser Leu Leu Phe Ala Ala Ala Val Ser Ala Ser His Asp Glu Glu
20 25 30

Glu Asp Arg Arg Gly Gly Arg Ser Leu Gln Arg Cys Val Gln Arg Cys
35 40 45

Gln Gln Asp Arg Pro Arg Tyr Ser His Ala Arg Cys Val Gln Glu Cys
50 55 60

Arg Asp Asp Gln Gln Gln His Gly Arg His Glu Gln Glu Glu Gln Gly
65 70 75 80

Arg Gly His Gly Arg His Gly Glu Gly Glu Arg Glu Glu Glu Gln Gly
85 90 95

Arg Gly Arg Gly Arg Arg Gly Gln Gly Glu Arg Glu Glu Glu Gln Gly
100 105 110

Arg Gly Arg Gly Arg Arg Gly Glu Gly Glu Arg Asp Glu Glu His Gly
115 120 125

Asp Gly Arg Arg Pro Tyr Val Phe Gly Pro Arg Ser Phe Arg Arg Ile
130 135 140

Ile Arg Ser Asp His Gly Phe Val Lys Ala Leu Arg Pro Phe Asp Glu
145 150 155 160

Val Ser Arg Leu Leu Arg Gly Ile Arg Asn Tyr Arg Val Ala Ile Met
165 170 175

Glu Val Asn Pro Arg Ala Phe Val Val Pro Gly Leu Thr Asp Ala Asp
180 185 190

Gly Val Gly Tyr Val Ala Gln Gly Glu Gly Val Leu Thr Val Ile Glu
195 200 205

Asn Gly Glu Lys Arg Ser Tyr Thr Val Arg Gln Gly Asp Val Ile Val
210 215 220

Ala Pro Ala Gly Ser Ile Met His Leu Ala Asn Thr Asp Gly Arg Arg
225 230 235 240

Lys Leu Val Ile Ala Lys Ile Leu His Thr Ile Ser Val Pro Gly Lys
 245 250 255
 Phe Gln Tyr Phe Ser Ala Lys Pro Leu Leu Ala Ser Leu Ser Lys Arg
 260 265 270
 Val Leu Thr Ala Ala Leu Lys Thr Ser Asp Glu Arg Leu Gly Ser Leu
 275 280 285
 Leu Gly Ser Arg Gln Gly Lys Glu Glu Glu Glu Lys Ser Ile Ser Ile
 290 295 300
 Val Arg Ala Ser Glu Glu Gln Leu Arg Glu Leu Arg Arg Gln Ala Ser
 305 310 315 320
 Glu Gly Asp Gln Gly His His Trp Pro Leu Pro Pro Phe Arg Gly Asp
 325 330 335
 Ser Arg Asp Thr Phe Asn Leu Leu Glu Gln Arg Pro Lys Ile Ala Asn
 340 345 350
 Arg His Gly Arg Leu Tyr Glu Ala Asp Ala Arg Ser Phe His Ala Leu
 355 360 365
 Ala Gln His Asp Val Arg Val Ala Val Ala Asn Ile Thr Pro Gly Ser
 370 375 380
 Met Thr Ala Pro Tyr Leu Asn Thr Gln Ser Phe Lys Leu Ala Val Val
 385 390 395 400
 Leu Glu Gly Glu Gly Glu Val Glu Ile Val Cys Pro His Leu Gly Arg
 405 410 415
 Asp Ser Glu Arg Arg Glu Gln Glu His Gly Lys Gly Arg Trp Arg Ser
 420 425 430
 Glu Glu Glu Glu Asp Asp Arg Arg Gln Gln Arg Arg Arg Gly Ser Gly
 435 440 445
 Ser Glu Ser Glu Glu Glu Gln Asp Gln Gln Arg Tyr Glu Thr Val Arg
 450 455 460
 Ala Arg Val Ser Arg Gly Ser Ala Phe Val Val Pro Pro Gly His Pro
 465 470 475 480
 Val Val Glu Ile Ala Ser Ser Arg Gly Ser Ser Asn Leu Gln Val Val
 485 490 495

Cys Phe Glu Ile Asn Ala Glu Arg Asn Glu Arg Val Trp Leu Ala Gly
500 505 510

Arg Asn Asn Val Ile Ala Lys Leu Asp Asp Pro Ala Gln Glu Leu Ala
515 520 525

Phe Gly Arg Pro Ala Arg Glu Val Gln Glu Val Phe Arg Ala Lys Asp
530 535 540

Gln Gln Asp Glu Gly Phe Val Ala Gly Pro Glu Gln Gln Gln Glu His
545 550 555 560

Glu Arg Gly Asp Arg Arg Arg Gly Asp Arg Gly Arg Gly Asp Glu Ala
565 570 575

Val Glu Ala Phe Leu Arg Met Ala Thr Ala Ala Leu
580 585

<210> 5
<211> 291
<212> PRT
<213> Unknown

<220>
<223> Alpha/beta-gliadin A-II precursor of wheat protein

<400> 5

Met Lys Thr Phe Pro Ile Leu Ala Leu Leu Ala Ile Val Ala Thr Thr
1 5 10 15

Ala Thr Thr Ala Val Arg Val Pro Val Pro Gln Leu Gln Leu Gln Asn
20 25 30

Pro Ser Gln Gln Gln Pro Gln Glu Gln Val Pro Leu Val Gln Glu Gln
35 40 45

Gln Phe Gln Gly Gln Gln Gln Pro Phe Pro Pro Gln Gln Pro Tyr Pro
50 55 60

Gln Pro Gln Pro Phe Pro Ser Gln Gln Pro Tyr Leu Gln Leu Gln Pro
65 70 75 80

Phe Pro Gln Pro Gln Leu Pro Tyr Pro Gln Pro Gln Pro Phe Arg Pro
85 90 95

Gln Gln Pro Tyr Pro Gln Pro Gln Pro Gln Tyr Ser Gln Pro Gln Gln
100 105 110

Pro Ile Ser Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln
115 120 125

Gln Gln Ile Leu Gln Gln Ile Leu Gln Gln Gln Leu Ile Pro Cys Arg
 130 135 140

Asp Val Val Leu Gln Gln His Asn Ile Ala His Gly Ser Ser Gln Val
 145 150 155 160

Leu Gln Glu Ser Thr Tyr Gln Leu Val Gln Gln Leu Cys Cys Gln Gln
 165 170 175

Leu Trp Gln Ile Pro Glu Gln Ser Arg Cys Gln Ala Ile His Asn Val
 180 185 190

Val His Ala Ile Ile Leu His Gln Gln His His His His Gln Gln Gln
 195 200 205

Gln Gln Gln Gln Gln Gln Gln Pro Leu Ser Gln Val Ser Phe Gln Gln
 210 215 220

Pro Gln Gln Gln Tyr Pro Ser Gly Gln Gly Phe Phe Gln Pro Ser Gln
 225 230 235 240

Gln Asn Pro Gln Ala Gln Gly Ser Phe Gln Pro Gln Gln Leu Pro Gln
 245 250 255

Phe Glu Glu Ile Arg Asn Leu Ala Leu Gln Thr Leu Pro Ala Met Cys
 260 265 270

Asn Val Tyr Ile Pro Pro Tyr Cys Thr Ile Ala Pro Phe Gly Ile Phe
 275 280 285

Gly Thr Asn
 290

<210> 6
 <211> 307
 <212> PRT
 <213> Unknown

<220>
 <223> Alpha/beta-gliadin MM1 precursor of wheat protein

<400> 6

Met Lys Thr Phe Leu Ile Leu Ala Leu Leu Ala Ile Val Ala Thr Thr
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Ala Arg Ile Ala Val Arg Val Pro Val Pro Gln Leu Gln Pro Gln Asn
 20 25 30

Pro Ser Gln Gln Gln Pro Gln Glu Gln Val Pro Leu Val Gln Gln Gln
 35 40 45

Gln Phe Pro Gly Gln Gln Gln Pro Phe Pro Pro Gln Gln Pro Tyr Pro
 50 55 60

Gln Pro Gln Pro Phe Pro Ser Gln Gln Pro Tyr Leu Gln Leu Gln Pro
 65 70 75 80

Phe Pro Gln Pro Gln Leu Pro Tyr Pro Gln Pro Gln Leu Pro Tyr Pro
 85 90 95

Gln Pro Gln Leu Pro Tyr Pro Gln Pro Gln Pro Phe Arg Pro Gln Gln
 100 105 110

Pro Tyr Pro Gln Ser Gln Pro Gln Tyr Ser Gln Pro Gln Gln Pro Ile
 115 120 125

Ser Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Gln Lys Gln Gln
 130 135 140

Gln Gln Gln Gln Gln Gln Ile Leu Gln Gln Ile Leu Gln Gln Gln Leu
 145 150 155 160

Ile Pro Cys Arg Asp Val Val Leu Gln Gln His Ser Ile Ala Tyr Gly
 165 170 175

Ser Ser Gln Val Leu Gln Gln Ser Thr Tyr Gln Leu Val Gln Gln Leu
 180 185 190

Cys Cys Gln Gln Leu Trp Gln Ile Pro Glu Gln Ser Arg Cys Gln Ala
 195 200 205

Ile His Asn Val Val His Ala Ile Ile Leu His Gln Gln Gln Gln Gln
 210 215 220

Gln Gln Gln Gln Gln Gln Gln Pro Leu Ser Gln Val Ser Phe Gln Gln
 225 230 235 240

Pro Gln Gln Gln Tyr Pro Ser Gly Gln Gly Ser Phe Gln Pro Ser Gln
 245 250 255

Gln Asn Pro Gln Ala Gln Gly Ser Val Gln Pro Gln Gln Leu Pro Gln
 260 265 270

Phe Glu Glu Ile Arg Asn Leu Ala Leu Glu Thr Leu Pro Ala Met Cys
 275 280 285

Asn Val Tyr Ile Pro Pro Tyr Cys Thr Ile Ala Pro Val Gly Ile Phe
 290 295 300

Gly Thr Asn
305

<210> 7
<211> 327
<212> PRT
<213> Triticum aestivum

<400> 7

Met Lys Thr Leu Leu Ile Leu Thr Ile Leu Ala Met Ala Ile Thr Ile
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Gly Thr Ala Asn Ile Gln Val Asp Pro Ser Gly Gln Val Gln Trp Leu
20 25 30

Gln Gln Gln Leu Val Pro Gln Leu Gln Gln Pro Leu Ser Gln Gln Pro
35 40 45

Gln Gln Thr Phe Pro Gln Pro Gln Gln Thr Phe Pro His Gln Pro Gln
50 55 60

Gln Gln Val Pro Gln Pro Gln Gln Pro Gln Gln Pro Phe Leu Gln Pro
65 70 75 80

Gln Gln Pro Phe Pro Gln Gln Pro Gln Gln Pro Phe Pro Gln Thr Gln
85 90 95

Gln Pro Gln Gln Pro Phe Pro Gln Gln Pro Gln Gln Pro Phe Pro Gln
100 105 110

Thr Gln Gln Pro Gln Gln Pro Phe Pro Gln Gln Pro Gln Gln Pro Phe
115 120 125

Pro Gln Thr Gln Gln Pro Gln Gln Pro Phe Pro Gln Leu Gln Gln Pro
130 135 140

Gln Gln Pro Phe Pro Gln Pro Gln Gln Gln Leu Pro Gln Pro Gln Gln
145 150 155 160

Pro Gln Gln Ser Phe Pro Gln Gln Gln Arg Pro Phe Ile Gln Pro Ser
165 170 175

Leu Gln Gln Gln Leu Asn Pro Cys Lys Asn Ile Leu Leu Gln Gln Cys
180 185 190

Lys Pro Ala Ser Leu Val Ser Ser Leu Trp Ser Ile Ile Trp Pro Gln
195 200 205

Ser Asp Cys Gln Val Met Arg Gln Gln Cys Cys Gln Gln Leu Ala Gln

210 215 220
 Ile Pro Gln Gln Leu Gln Cys Ala Ala Ile His Ser Val Val His Ser
 225 230 235 240
 Ile Ile Met Gln Gln Gln Gln Gln Gln Gln Gln Gly Met His
 245 250 255
 Ile Phe Leu Pro Leu Ser Gln Gln Gln Gln Val Gly Gln Gly Ser Leu
 260 265 270
 Val Gln Gly Gln Gly Ile Ile Gln Pro Gln Gln Pro Ala Gln Leu Glu
 275 280 285
 Ala Ile Arg Ser Leu Val Leu Gln Thr Leu Pro Ser Met Cys Asn Val
 290 295 300
 Tyr Val Pro Pro Glu Cys Ser Ile Met Arg Ala Pro Phe Ala Ser Ile
 305 310 315 320
 Val Ala Gly Ile Gly Gly Gln
 325
 <210> 8
 <211> 302
 <212> PRT
 <213> Triticum aestivum
 <400> 8
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 20 25 30
 Gln Gln Gln Pro Phe Pro Gln Pro Gln Gln Pro Phe Cys Gln Gln Pro
 35 40 45
 Gln Gln Thr Ile Pro Gln Pro His Gln Thr Phe His His Gln Pro Gln
 50 55 60
 Gln Thr Phe Pro Gln Pro Gln Gln Thr Tyr Pro His Gln Pro Gln Gln
 65 70 75 80
 Gln Phe Pro Gln Thr Gln Gln Pro Gln Gln Pro Phe Pro Gln Pro Gln
 85 90 95
 Gln Thr Phe Pro Gln Gln Pro Gln Leu Pro Phe Pro Gln Gln Pro Gln
 100 105 110

Gln Pro Phe Pro Gln Pro Gln Gln Pro Gln Gln Pro Phe Pro Gln Ser
 115 120 125

Gln Gln Pro Gln Gln Pro Phe Pro Gln Pro Gln Gln Gln Phe Pro Gln
 130 135 140

Pro Gln Gln Pro Gln Gln Ser Phe Pro Gln Gln Gln Gln Pro Ala Ile
 145 150 155 160

Gln Ser Phe Leu Gln Gln Gln Met Asn Pro Cys Lys Asn Phe Leu Leu
 165 170 175

Gln Gln Cys Asn His Val Ser Leu Val Ser Ser Leu Val Ser Ile Ile
 180 185 190

Leu Pro Arg Ser Asp Cys Gln Val Met Gln Gln Gln Cys Cys Gln Gln
 195 200 205

Leu Ala Gln Ile Pro Gln Gln Leu Gln Cys Ala Ala Ile His Ser Val
 210 215 220

Ala His Ser Ile Ile Met Gln Gln Glu Gln Gln Gln Gly Val Pro Ile
 225 230 235 240

Leu Arg Pro Leu Phe Gln Leu Ala Gln Gly Leu Gly Ile Ile Gln Pro
 245 250 255

Gln Gln Pro Ala Gln Leu Glu Gly Ile Arg Ser Leu Val Leu Lys Thr
 260 265 270

Leu Pro Thr Met Cys Asn Val Tyr Val Pro Pro Asp Cys Ser Thr Ile
 275 280 285

Asn Ile Pro Tyr Ala Asn Ile Asp Ala Gly Ile Gly Gly Gln
 290 295 300

<210> 9
 <211> 20
 <212> PRT
 <213> Unknown

<220>
 <223> Diabetogenic epitope homopolymer based on wheat protein
 <400> 9

Glu Glu Gln Leu Arg Glu Leu Arg Arg Gln Glu Glu Gln Leu Arg Glu
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Leu Arg Arg Gln
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<210> 10
<211> 18
<212> DNA
<213> Artificial

<220>
<223> Forward primer for WP5212 wheat gene

<400> 10
accacgggtt cgtcaagg

18

<210> 11
<211> 18
<212> DNA
<213> Artificial

<220>
<223> Reverse primer for WP5212 wheat gene

<400> 11
aacacctcct gcacctcc

18

<210> 12
<211> 16
<212> PRT
<213> Artificial

<220>
<223> Antigenic WP5212 peptide based on wheat protein

<400> 12

Cys Arg Asp Thr Phe Asn Leu Leu Glu Gln Arg Pro Lys Ile Ala Asn
1 5 10 15

<210> 13
<211> 15
<212> PRT
<213> Artificial

<220>
<223> Antigenic WP5212 peptide based on wheat protein

<400> 13

Arg Gly Asp Glu Ala Val Glu Ala Phe Leu Arg Met Ala Thr Ala
1 5 10 15

<210> 14
<211> 8
<212> PRT
<213> Unknown

<220>
<223> Tryptic peptide of wheat protein

<400> 14

Arg Pro Tyr Val Phe Gly Pro Arg

1 5

<210> 15
<211> 9
<212> PRT
<213> unknown

<220>
<223> Tryptic peptide of wheat protein

<400> 15

Val Ala Ile Met Glu Val Asn Pro Arg
1 5

<210> 16
<211> 17
<212> PRT
<213> unknown

<220>
<223> Tryptic peptide of wheat protein

<400> 16

Ala Gln Asp Gln Asp Glu Gly Phe Val Ala Gly Pro Glu Gln Gln Ser
1 5 10 15

Arg

<210> 17
<211> 15
<212> PRT
<213> unknown

<220>
<223> Tryptic peptide of wheat protein

<400> 17

Phe Gln Phe Leu Ser Val Lys Pro Leu Leu Ala Ser Leu Ser Lys
1 5 10 15

<210> 18
<211> 14
<212> PRT
<213> unknown

<220>
<223> Tryptic peptide of wheat protein

<400> 18

Gly Ser Glu Ser Glu Ser Glu Glu Glu Glu Gln Gln Arg
1 5 10

<210> 19
<211> 15

<212> PRT
<213> unknown

<220>
<223> Tryptic peptide of wheat protein

<400> 19

Leu Gly Ser Pro Ala Gln Glu Leu Thr Phe Gly Arg Pro Ala Arg
1 5 10 15

<210> 20
<211> 11
<212> PRT
<213> unknown

<220>
<223> Tryptic peptide of wheat protein

<400> 20

Asp Thr Phe Asn Leu Leu Glu Gln Arg Pro Lys
1 5 10

<210> 21
<211> 11
<212> PRT
<213> unknown

<220>
<223> Tryptic peptide of wheat protein

<400> 21

Ser Phe His Ala Leu Ala Asn Gln Asp Val Arg
1 5 10

<210> 22
<211> 11
<212> PRT
<213> unknown

<220>
<223> Tryptic peptide of wheat protein

<400> 22

Gly Gly His Ser Leu Gln Gln Cys Val Gln Arg
1 5 10

<210> 23
<211> 10
<212> PRT
<213> unknown

<220>
<223> Tryptic peptide of wheat protein

<400> 23

Ala Leu Arg Pro Phe Asp Gln Val Ser Arg

1 5 10

<210> 24
 <211> 10
 <212> PRT
 <213> unknown

<220>
 <223> Tryptic peptide of wheat protein

<400> 24

Ile Ile Gln Ser Asp His Gly Phe Val Arg
 1 5 10

<210> 25
 <211> 9
 <212> PRT
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<220>
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<400> 25

His Glu Gln Glu Glu Glu Gln Gly Arg
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<210> 26
 <211> 10
 <212> PRT
 <213> unknown

<220>
 <223> Tryptic peptide of wheat protein

<400> 26

Gly Asp Glu Ala Val Glu Thr Phe Leu Arg
 1 5 10

<210> 27
 <211> 8
 <212> PRT
 <213> unknown

<220>
 <223> Tryptic peptide of wheat protein

<400> 27

Glu Gln Glu Gln Glu Gln Glu Arg
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<210> 28
 <211> 10
 <212> PRT
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<220>

<223> Tryptic peptide of wheat protein

<400> 28

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1 5 10

<210> 29

<211> 8

<212> PRT

<213> unknown

<220>

<223> Tryptic peptide of wheat protein

<400> 29

Glu Glu Glu Glu Asp Asp Gln Arg
1 5

<210> 30

<211> 10

<212> PRT

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<220>

<223> Tryptic peptide of wheat protein

<400> 30

Glu Ala Ala Glu Gly Gly Gln Gly His Arg
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<210> 31

<211> 8

<212> PRT

<213> unknown

<220>

<223> Tryptic peptide of wheat protein

<400> 31

Asp Asp Gln Gln Gln His Gly Arg
1 5

<210> 32

<211> 29

<212> PRT

<213> unknown

<220>

<223> Tryptic peptide of wheat protein

<400> 32

Ala Thr Ile Pro Leu Leu Phe Leu Leu Gly Thr Ser Leu Leu Phe Ala
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Ala Ala Val Ser Ala Ser His Asp Glu Glu Glu Asp Arg

20

25

<210> 33
 <211> 31
 <212> PRT
 <213> unknown

<220>
 <223> Tryptic peptide of wheat protein
 <400> 33

Ala Phe Val Val Pro Gly Leu Thr Asp Ala Asp Gly Val Gly Tyr Val
 1 5 10 15

Ala Gln Gly Glu Gly Val Leu Thr Val Ile Glu Asn Gly Glu Lys
 20 25 30

<210> 34
 <211> 22
 <212> PRT
 <213> unknown

<220>
 <223> Tryptic peptide of wheat protein
 <400> 34

Val Ala Val Ala Asn Ile Thr Pro Gly Ser Met Thr Ala Pro Tyr Leu
 1 5 10 15

Asn Thr Gln Ser Phe Lys
 20

<210> 35
 <211> 21
 <212> PRT
 <213> unknown

<220>
 <223> Tryptic peptide of wheat protein
 <400> 35

Gln Gly Asp Val Ile Val Ala Pro Ala Gly Ser Ile Met His Leu Ala
 1 5 10 15

Asn Thr Asp Gly Arg
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<210> 36
 <211> 20
 <212> PRT
 <213> unknown

<220>
 <223> Tryptic peptide of wheat protein

<400> 36

Leu Ala Val Val Leu Glu Gly Glu Gly Glu Val Glu Ile Val Cys Pro
1 5 10 15

His Leu Gly Arg
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<210> 37

<211> 19

<212> PRT

<213> unknown

<220>

<223> Tryptic peptide of wheat protein

<400> 37

Gly Ser Ala Phe Val Val Pro Pro Gly His Pro Val Val Glu Ile Ala
1 5 10 15

Ser Ser Arg

<210> 38

<211> 19

<212> PRT

<213> unknown

<220>

<223> Tryptic peptide of wheat protein

<400> 38

Asp Gln Gln Asp Glu Gly Phe Val Ala Gly Pro Glu Gln Gln Gln Glu
1 5 10 15

His Glu Arg

<210> 39

<211> 17

<212> PRT

<213> unknown

<220>

<223> Tryptic peptide of wheat protein

<400> 39

Gln Ala Ser Glu Gly Asp Gln Gly His His Trp Pro Leu Pro Pro Phe
1 5 10 15

Arg

<210> 40

<211> 16
<212> PRT
<213> unknown

<220>
<223> Tryptic peptide of wheat protein

<400> 40

Gly	Ser	Ser	Asn	Leu	Gln	Val	Val	Cys	Phe	Glu	Ile	Asn	Ala	Glu	Arg
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<210> 41
<211> 15
<212> PRT
<213> unknown

<220>
<223> Tryptic peptide of wheat protein

<400> 41

Leu	Asp	Asp	Pro	Ala	Gln	Glu	Leu	Ala	Phe	Gly	Arg	Pro	Ala	Arg
1				5					10					15

<210> 42
<211> 15
<212> PRT
<213> unknown

<220>
<223> Tryptic peptide of wheat protein

<400> 42

Phe	Gln	Tyr	Phe	Ser	Ala	Lys	Pro	Leu	Leu	Ala	Ser	Leu	Ser	Lys
1				5					10					15

<210> 43
<211> 14
<212> PRT
<213> unknown

<220>
<223> Tryptic peptide of wheat protein

<400> 43

Gly	Ser	Gly	Ser	Glu	Ser	Glu	Glu	Glu	Gln	Asp	Gln	Gln	Arg
1				5					10				

<210> 44
<211> 11
<212> PRT
<213> unknown

<220>
<223> Tryptic peptide of wheat protein

<400> 44

Ser Phe His Ala Leu Ala Gln His Asp Val Arg
1 5 10

<210> 45
<211> 10
<212> PRT
<213> unknown

<220>
<223> Tryptic peptide of wheat protein

<400> 45

Gly Asp Glu Ala Val Glu Ala Phe Leu Arg
1 5 10

<210> 46
<211> 10
<212> PRT
<213> unknown

<220>
<223> Tryptic peptide of wheat protein

<400> 46

Ala Leu Arg Pro Phe Asp Glu Val Ser Arg
1 5 10

<210> 47
<211> 9
<212> PRT
<213> unknown

<220>
<223> Tryptic peptide of wheat protein

<400> 47

Gly Asp Ser Ser Thr Met Ala Thr Arg
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